

HIV-1 p24 Antibody [7F4] (biotin)

Catalog # ASC12023

Product Information

Application	WB, E
Primary Accession	P04591
Other Accession	AAB50258 , 327745
Reactivity	Virus
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	7F4
Calculated MW	55930
Concentration (mg/ml)	1 mg/mL
Conjugate	Biotin
Application Notes	PM-6585-biotin can be used for detection of p24 by Western blot or ELISA at 0.2 – 0.5 µg/mL.

Additional Information

Gene ID	155030
Other Names	Gag polyprotein, Pr55Gag, Matrix protein p17, MA, Capsid protein p24, CA, Spacer peptide p2, Nucleocapsid protein p7, NC, Spacer peptide p1, p6-gag, gag
Target/Specificity	GAG; By Western blot, anti-HIV-1 p24 antibody detects a ~24 kDa, a ~41 kDa, and a ~55 kDa protein, corresponding to HIV-1 p24 and to its precursors p41 and p55, respectively, in HIV-1 samples.
Reconstitution & Storage	HIV-1 p24 Monoclonal Antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	HIV-1 p24 Antibody [7F4] (biotin) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	gag
Function	[Gag polyprotein]: Mediates, with Gag-Pol polyprotein, the essential events in virion assembly, including binding the plasma membrane, making the protein-protein interactions necessary to create spherical particles, recruiting the viral Env proteins, and packaging the genomic RNA via direct interactions with the RNA packaging sequence (Psi).
Cellular Location	[Gag polyprotein]: Host cell membrane; Lipid- anchor. Host endosome, host multivesicular body {ECO:0000250 UniProtKB:P12493}. Note=These locations

are probably linked to virus assembly sites. The main location is the cell membrane, but under some circumstances, late endosomal compartments can serve as productive sites for virion assembly.
{ECO:0000250|UniProtKB:P12493} [Capsid protein p24]: Virion.

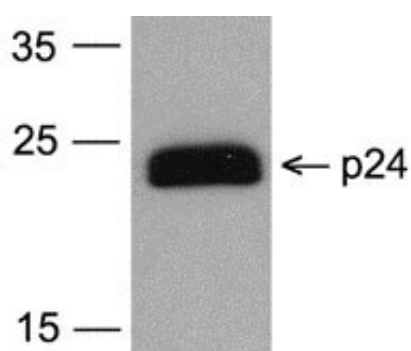
Background

HIV-1 p24 Monoclonal Antibody: The human immunodeficiency virus type 1 (HIV-1) particle consists of an envelope, a core and the region between the two termed matrix (1). The HIV-1 Gag protein is a late structural protein that contains four proteins: matrix (p17), capsid (p24), nucleocapsid (p7) and the p6 protein (2). The p24 constitutes the major core component of the virus and shows high degree of sequence conservation among HIV isolates. The Gag p24 has been used as an integral part of multicomponent HIV-1 vaccines (3).

References

Goto T, Nakai M, and Ikuta K. The life-cycle of human immunodeficiency virus type 1. *Micron* 1998; 29:123-38.
Freed EO. HIV-1 gag proteins: diverse functions in the virus life cycle. *Virology* 1998; 251:1-15.
Flynn BJ, Kastenmuller K, Wille-Reece U, et al. Immunization with HIV Gag targeted to dendritic cells followed by recombinant New York vaccinia virus induces robust T-cell immunity in nonhuman primates. *Proc. Natl. Acad. Sci. USA* 2011; 108:7131-6.

Images



Western blot analysis of 20 ng of HIV-1 p24 protein with APS12023 at 0.2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.